Message

From: Craig, Harry [Craig.Harry@epa.gov]

Sent: 10/13/2017 6:42:12 PM

To: Shuster, Kenneth [Shuster.Kenneth@epa.gov]

CC: Halstead, Sandra [Halstead.Sandra@epa.gov]; Palumbo, Janice [Palumbo.Jan@epa.gov]; Buelow, Laura

[Buelow.Laura@epa.gov]

Subject: FW: Use of Confined Detonation Chamber at Pier 91 for Underwater Naval Munitions

Attachments: Pier-91-CDC-ECBC.pdf

Ken,

You were looking for examples of alternatives to OB/OD disposal of munitions, here are some of the articles and photos on the T-30 confined detonation chamber used at Pier 90/91 FUDS site in Seattle.

Harry

From: Craig, Harry

Sent: Thursday, April 28, 2016 9:04 AM **To:** Maddox, Doug < Maddox. Doug@epa.gov>

Cc: Vazquez, Julio <Vazquez.Julio@epa.gov>; Rodriguez, Daniel <Rodriguez.Daniel@epa.gov>; Huang, Judy

<Huang.Judy@epa.gov>

Subject: FW: Use of Confined Detonation Chamber at Pier 91 for Underwater Naval Munitions

F.Y.I. - Articles and photos on the Pier 91 use of the CDC.

Harry

From: Craig, Harry

Sent: Thursday, August 01, 2013 4:44 PM

To: Denice Taylor < dtaylor@suquamish.nsn.us; 'JOHN.BOWER@dnr.wa.gov' < JOHN.BOWER@dnr.wa.gov>

Subject: FW: Use of Confined Detonation Chamber at Pier 91 for Underwater Naval Munitions

Denice, John,

Here is the disposal/treatment system that was used by the Corps instead of open detonation at Pier 91 in Seattle. The technology would also be applicable to Jackson Park recovered munitions, as they are the same type of WW-II era Navy munitions.

Harry

From: Craig, Harry

Sent: Friday, June 21, 2013 3:34 PM

To: Faulk, Dennis; Garvey, Melanie; Doster, Kathleen; Maddox, Doug; Queitzsch, Mary

Cc: Villa, Clifford; Mackey, Cyndy; Albright, Rick

Subject: Use of Confined Detonation Chamber at Pier 91 for Underwater Naval Munitions

F.Y.I. - Here is some background on the 1st deployment of the confined detonation chamber (CDC) for the munitions recovered during the Corps Removal and RI at Pier 91 FUDS site. This is the CDC system owned by the Army, and will handle up to 30 pounds Net Explosive Weight (NEW), or about a 5 inch Naval projectile size.

Deployable T-30 makes first trip to the west coast, safely destroy munitions in city setting



Supply Depot in Seattle can get busy in April, the time when cruise ships depart for Alaska and fishing vessels travel to the Pacific Ocean. The northernmost port in the contiguous U.S. was more than just a populous city last April, it was home to ECBC's Chemical Biological Applications & Risk Reduction (CBARR) Business Unit

For three weeks, CBARR personnel supported the U.S. Army Corps of Engineers, Omaha District, in a remediation project that included the on-site destruction of conventional recovered munitions at the Port of Seattle. Remedial investigation of the non-chemical munitions was required to determine the nature of the munitions and the extent of the explosives in order to executive proper response actions.

This was the first time the 160,000-pound Transportable Detonation Chamber T-30, which is owned by the U.S. Army and operated by CBARR, was deployed on a long distance mission to the west coast. The T-30 is a mobile, contained detonation chamber that destroys munitions in a safe and environmentally sound manner, and was critical to the success of the operation in the densely populated port city of Seattle.

"That's what CBARR brings to the table. Our experienced personnel are able to mobilize and setup a site very quickly thereby lowering the costs to our customers," said Ray DiBerardo, CBARR project manager. "Utilizing a transportable system is a huge asset that enables us to provide a one step destruction solution of conventional munitions to customers anywhere and the high throughput allows us stay on schedule to meet their needs."

One five-inch Navy projectile and multiple three-inch, five-inch and 40-millimeter casings were safely destroyed on-site by the T-30 during the three-day operation at one of the busiest ports crucial to the U.S. economy. An improved detonation process and particulate filter system optimized system performance, which integrated recent advancements in fragmentation control and donor charge design. Secondary wastes were also limited and no liquid process wastes resulted from the T-30 operation.

Source: https://www.ecbc.army.mil/comp/cbrne-field-ops.html